

# Simple Ground Equipment & Services

## Surface to air missiles

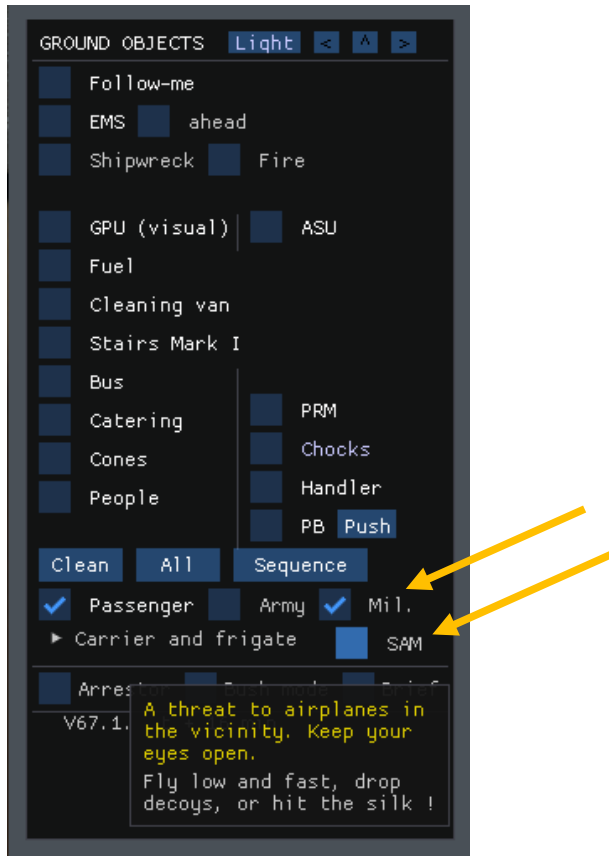


# Simple Ground Equipment & Services Surface to Air Missiles

## Displaying the SAM site

Below 200 KIAS the SGES window becomes available in X-Plane :

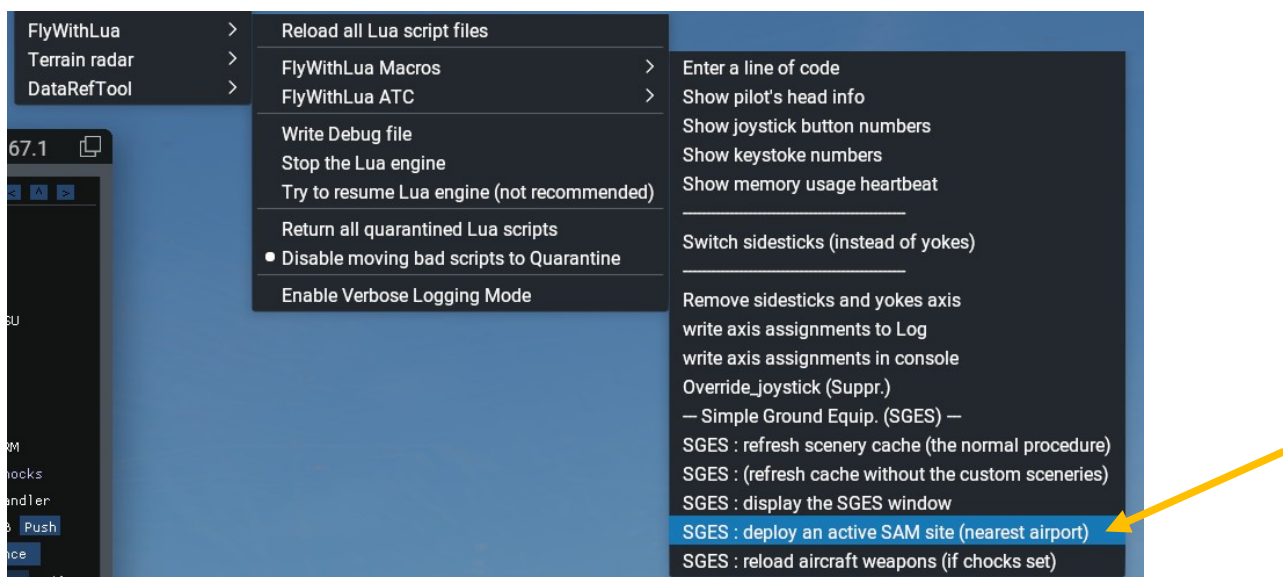
- 1) Open the SGES window using your keyboard key
- 2) Tick the box "Mil." or the box "Army" if this second one is available on your installation.
- 3) Tick the box "SAM" which appears. At that point the SAM site is displayed at the nearest airport.



What always works is to use the drop down menus :

X-Plane *Plugins* menu → *FlyWithLua* → *FlyWithLua Macros* → *SGES : deploy an active SAM site*

This shortcut allows to display the threat at the nearest airport when your airplane is flying fast.



## Composition of the SAM Site

We used artistic licence to represent an imaginary low cost anti-aircraft site.

Our imagination led us to compose the threat by short to medium range missiles complemented by an active search and tracking radar to help designate their target.



While we depicted heat-seeking missile on their launcher, we elected to slave them to the radar station for a better initial target designation. Afterwards they can fly using their own heat-seeking sensor when reaching the vicinity of it.

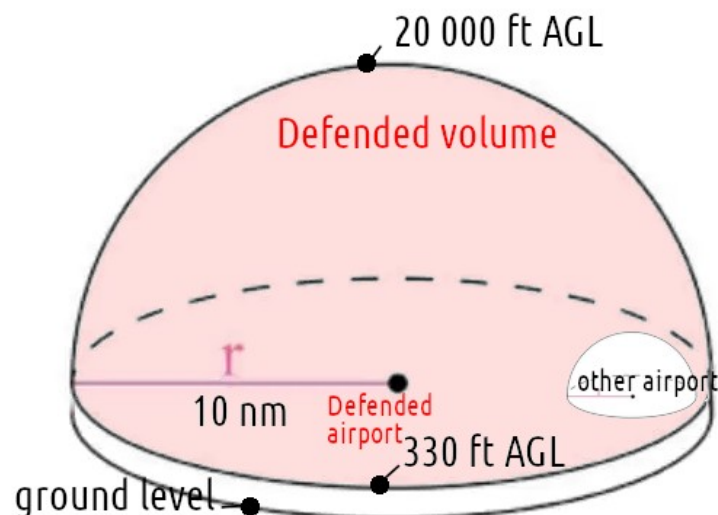
## Behavior of the SAM Site

### **The SAM site will lock your aircraft and fire at you :**

The SAM site will adopt an airfield defense posture.

The conditions are :

1. SAM site displayed (it's displayed at the nearest airport at the time of engagement)
2. The defended airfield stays the nearest airport from the user aircraft
3. The aircraft stays at less than 10 NM of the defended airfield
4. The aircraft indicated airspeed is less than 400 KIAS
5. 100 meters agl < aircraft height above the ground < 6000 meters agl
6. The missile launcher vehicle stays the 3D object Van\_AAA.obj. in the file *Simple\_Ground\_Equipment\_and\_Services\_CONFIG\_vehicles.lua*. (selecting another vehicle kills the activity of the SAM site)





### **Escaping any missile launched at you is possible :**

1. Promptly fly outside of the volume of engagement of the SAM. Fly low ! Very low.
2. Drop chaffs. Those radar decoys will annoy the directing radar station.
3. Drop flares. Those decoys will annoy the missile if it transitioned to it's own-heat-seeking sensor.

### **Tips**

If you fly away, as soon as the airport where the SAM site is displayed isn't the nearest one any more, the SAM site won't look to engage you any more. Even if the defended airport is less than 10 NM away.

At all times, to prevent the SAM site to continuously engage you, make the site disappear using the drop down menus or the SGES window. I do this when I simulate an attack of the site, and simulate me having destroyed it.

